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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,519	09/13/2001	Yu Wang	040489-0177	2614
22428 7590 05/15/2007 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			EXAMINER ROJAS, BERNARD	
			ART UNIT 2832	PAPER NUMBER
			MAIL DATE 05/15/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/682,519	WANG ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Bernard Rojas	2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09/19/2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 7, 9, 11, 14-16, 19, 39 and 40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7, 9, 11, 14-16, 19, 39 and 40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments, filed 9/19/2006, with respect to the rejection(s) of claim(s) 1-22, 39 and 40 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made with van Oort [US 5,923,235] in view of Hsieh [US 5,016,638].

Applicant states that there is no motivation to combine van Oort and Hsieh to create a clam-shell style open MRI that is mounted on a vibration isolation system. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the vibration isolation system of Hsieh with the MRI of van Oort in order to isolate a MRI from vibrations in the structure in order to reduce scanner image degradation [abs, Hsieh].

Applicant relies on Hsieh col. 8 lines 25-32

also states that Hsieh teaches away from using a clam-shell type superconductive MRI system on the disclosed vibration isolation system, and that is a superconductive magnet system is used, it should be a closed MRI of the type disclosed in US 4,766,378 to Danby

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 7, 9, 11, 14, 19 and 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over van Oort [US 5,923,235] in view of Hsieh [US 5,016,638].

Claim 1, van Oort discloses an open MRI system comprising an open MRI magnet system, wherein the MRI magnet system comprises a clam-shell MRI magnet system [figure 1].

van Oort fails to teach the use of a vibration isolation system adapted to support the MRI.

Hsieh teaches a medical imaging device [10] located on a vibration isolation system [74] mounted in the structure [72] of a building [col. 7 lines 20-25].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the vibration isolation system of Hsieh with the MRI of van Oort in order to isolate a MRI from vibrations in the structure in order to reduce scanner image degradation [abs].

Claims 7 and 19, van Oort as modified by Hsieh discloses an MRI system, wherein the vibration isolation system is secured to a floor [72] and the MRI magnet system is attached over the vibration isolation system [figure 2].

Claim 9, van Oort as modified by Hsieh discloses the MRI system of claim 1, further comprising a structural holder [18] positioned between the vibration isolation system and the MRI magnet system [figures 2, 3 and 5].

Claim 11, van Oort as modified by Hsieh discloses the MRI system of claim 10, wherein the vibration isolation system is mounted on posts [74] such that MRI magnet

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system supports do not contact a floor of a site where the MRI magnet system is located [figures 2 and 3].

Claim 14, van Oort discloses an open magnet assembly with a floor mount comprising:

- a first assembly mounted about a first longitudinally-extending and generally-vertically-aligned axis including:

- at least one superconducting main coil (26) positioned around the axis; and

- a vacuum enclosure (24) enclosing the at least one superconductive main coil;

- a second assembly mounted about a second longitudinally-extending and generally-vertically-aligned axis coaxially aligned with the first axis and spaced longitudinally apart from and disposed below the first assembly, the second assembly including:

- at least one superconducting main coil (30) positioned around the axis; and

- a vacuum enclosure (28) enclosing the at least one superconductive main coil;

and

- at least one support beam (32) external to the first and second vacuum enclosures having a first end attached to the first assembly and a second end attached to the second assembly.

Claim 39, van Oort discloses the open MRI system of claim 1, wherein the open clam-shell MRI magnet system comprises a vertically aligned MRI magnet system [figure 1].

Claim 40, van Oort discloses the open MRI system of claim 39, wherein the vertically- aligned, open clam-shell MRI magnet system comprises: a first magnet assembly containing a first superconductive coil [24]; a second magnet assembly containing a second superconductive coil [30]; and only two support members [32] supporting the second magnet assembly over the first magnet assembly, wherein the two support members are not diametrically aligned to a diameter line of the first and the second magnet assemblies [figure 1].

Claims 2, 3, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over van Oort [US 5,923,235] in view of Hsieh [US 5,016,638], as applied to claims 1, 7-11, 14, 19-21 and 39-40 above, and further in view of Ohsaki [US 6,202,492].

van Oort in view of Hsieh discloses the instant claimed invention except for the isolators being adjustable and actively pneumatically controlled.

Ohsaki discloses a surface [6] being supported by adjustable actively controlled pneumatic isolators [4a-d, column 5, lines 1-12].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to the isolator design of Ohsaki for the isolators of Whittaker et al. in view of van Oort for the purpose of accommodating variations in the operating environment.

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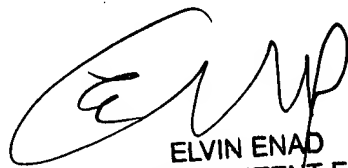
**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Rojas whose telephone number is (571) 272-1998. The examiner can normally be reached on M and W-F, 5:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Br

  
ELVIN ENAD  
SUPERVISORY PATENT EXAMINER  
10 May 07